

MONOVALENT CATION-CONTAINING WELL FLUIDS

Abstract

[0048] A monovalent cation containing well fluid composed of an aqueous brine containing at least 0.6 equivalents per liter of a water soluble monovalent cation salt, is substantially free of divalent cations, and an amount of a starch derivative selected such that the well fluid has the following characteristics: (a) a low shear rate viscosity greater than about 5,000 centipoise; (b) a high shear rate viscosity at 511 sec^{-1} in the range from about 15 to about 70 centipoise measured at 120° F is described. The fluid may be formulated to be substantially free of xanthan gums and preferably has less than 0.25 lb/bbl of xanthan gum.